

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF: U.S. Patent No. 7,583,760

USPTO CONFIRMATION CODE: 3945

APPLICATION NO.: 10/535,479

PCT FILED: October 09, 2003

U.S. FILED: October 21, 2005

EXAMINER: Khai Tran

GROUP ART UNIT: 2611

FOR: CALCULATION OF SOFT DECISION VALUES USING RELIABILITY
INFORMATION OF THE AMPLITUDE

37 CFR 1.322 & 37 CFR 1.323 REQUEST FOR CERTIFICATE OF CORRECTION
FOR USPTO AND/OR APPLICANT MISTAKE

HONORABLE COMMISSIONER OF PATENTS & TRADEMARKS

SIR:

The following is a request for a certificate of correction in Serial Number 10/535,479, now Patent Number 7,583,760.

A certificate of correction under 35 USC 254 is respectfully requested in the above-identified patent.

The errors were the fault of both the applicant and USPTO and, accordingly, please charge **\$100.00** to our Deposit Account No. 50-1379. In the event that a further fee is required, please charge the amount to the same Deposit Account.

The exact locations where the errors appear in the patent and patent application are as follows:

On Page 2, in Field (56), under “OTHER PUBLICATIONS”, in Column 2, Line 2, delete “Hybird ARQ” and insert - - Hybrid ARQ - -, therefor.
(LIST OF REFERENCES CITED BY APPLICANT AND CONSIDERED BY EXAMINER DATED MAY 20, 2009, SHEET 1 OF 1, UNDER “NON PATENT LITERATURE DOCUMENTS”, ENTRY 1, LINE 2)

In Column 1, Line 63, delete “comprising” and insert - - comprising: - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009, PAGE 2, LINE 12)

In Column 2, Line 4, delete “signal ;” and insert - - signal; - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009, PAGE 2, LINE 17)

In Column 2, Line 42, delete “amplifier” and insert - - amplifier; - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009, PAGE 3, LINE 18)

In Column 4, Line 30, delete “comprising” and insert - - comprising: - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009, PAGE 6, LINE 13)

In Column 4, Line 56, delete “comprises” and insert - - comprises: - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009, PAGE 7, LINE 5)

In Column 5, Line 35, delete “schematic” and insert - - schematically - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009, PAGE 8, LINE 11)

In Column 6, Line 53, delete “O-component;” and insert - - Q-component; - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009, PAGE 10, LINE 12)

In Column 7, Line 45, delete “ $S_{l,m}$ ” and insert - - $s_{l,m}$ - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009, PAGE 11, LINE 16)

In Column 7, Line 46, delete “ $P(S_{l,m}=il\ r)$,” and insert - - $P(s_{l,m}=i|r)$, - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009, PAGE 11, LINE 17)

In Column 7, Line 47, delete “ $S_{l,m}$ ” and insert - - $s_{l,m}$ - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 11, LINE 17)

In Column 7, Line 49, delete “ $S_{l,m}$ ” and insert - - $s_{l,m}$ - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 11, LINE 19)

In Column 7, Line 50, delete “ $S_{l,m}$ ” and insert - - $s_{l,m}$ - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 11, LINE 20)

In Column 7, Line 53, delete “ $S_{l,m}=0$ and $S_{l,m}=1$ ” and insert - - $s_{l,m}=0$ and $s_{l,m}=1$ - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 11, LINE 21)

In Column 7, Line 55, delete “ $S_{l,m}=1$ and $S_{l,m}=0$ ” and insert - - $s_{l,m}=0$ and $s_{l,m}=1$ - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 11, LINE 23)

In Column 7, Line 60, delete “ $P(r|S_{l,m}=i)$ ” and insert - - $P(r|s_{l,m}=i)$ - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 11, LINE 27)

In Column 7, Line 64, in Equation (2), delete

$$P(S_{l,m} = 1) = c \sum_{S_l \in A_{l,m}} P(r, s_{l,m}) = 0, 1.$$

“ ” and insert - -

$$P\left(r \middle| s_{l,m} = i\right) = c \sum_{s_l \in A_{i,m}} P\left(r \middle| s_{l,m}\right), \quad i = 0, 1. \quad - -, \text{therefor.}$$

(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 11, LINE 28, EQUATION (2))

In Column 8, Line 1, delete “ $A_{l,m}=\{S_l|S_{l,m}=i\}$ ” and insert - - $A_{i,m}=\{s_l|s_{l,m}=i\}$ - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 11, LINE 29)

In Column 8, Line 6, delete “ $P(r, S_{l,m})$.” and insert - - $P(r, s_{l,m})$. - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 12, LINE 6)

In Column 8, Lines 11-15, in Equation (3), delete
 $\max_{s_i \in A_{i,m}} P(r, s_{i,m})$

$$L_{l,m} = \log \frac{s_i \in A_{l,m}}{\max_{s_i \in A_{i,m}} P(r, s_{i,m})} = \log \frac{P(r | \hat{s}_{1,l,m})}{P(r | \hat{s}_{0,l,m})}$$

“ $s_i \in A_{0,m}$ ” and

$$L_{l,m} = \log \frac{\max_{s_l \in A_{1,m}} P\langle r, s_{l,m} \rangle}{\max_{s_l \in A_{0,m}} P\langle r, s_{l,m} \rangle} = \log \frac{P\langle r, \hat{s}_{1,l,m} \rangle}{P\langle r, \hat{s}_{0,l,m} \rangle}$$

insert - - , therefor.
 (AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
 PAGE 12, LINE 9, EQUATION (3))

In Column 8, Line 19, delete “ $\hat{S}_{l,m}, i=0,$ ” and insert - - $\hat{s}_{i,l,m}, i=0,$ - -, therefor.
 (AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
 PAGE 12, LINE 10)

In Column 8, Line 22, after “by” delete “the”.
 (AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
 PAGE 12, LINE 12)

In Column 8, Line 26, in Equation (4), delete

$$\log \sum_{s \in A_{l,m}} P(r, s) \approx \log \max_{s \in A_{l,m}} P(r, s)$$

and insert - - $\log \sum_{s \in A_{i,m}} P(r, s) \approx \log \max_{s \in A_{i,m}} P(r, s)$ - -, therefor.

(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
 PAGE 12, LINE 26, EQUATION (4))

In Column 8, Line 37, delete “ $\sigma_2,$ ” and insert - - $\sigma^2,$ - -, therefor.
 (AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
 PAGE 12, LINE 19)

In Column 8, Line 51, delete “ $S_l,$ ” and insert - - $s_l,$ - -, therefor.
 (AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
 PAGE 12, LINE 23)

In Column 8, Line 52, delete “ $S_i,$ ” and insert - - $s_i,$ - -, therefor.
 (AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
 PAGE 12, LINE 24)

In Column 8, Line 56, delete " S_l ." and insert - - s_l - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 13, LINE 5)

In Column 8, Line 60, delete " S_l " and insert - - s_l - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 13, LINE 7)

In Column 8, Line 62, delete " S_l " and insert - - s_l - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 13, LINE 9)

In Column 8, Line 63, delete " S_l " and insert - - s_l - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 13, LINE 10)

In Column 8, Line 64, delete " S_l ." and insert - - s_l - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 13, LINE 10)

In Column 9, Line 25, delete " $P(S_{l,m}=i|r,$ " and insert - - $P(s_{l,m}=i|r,$ - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 13, LINE 26)

In Column 9, Line 26, delete " $S_{l,m}=i,$ " and insert - - $s_{l,m}=i,$ - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 13, LINE 26)

In Column 9, Line 58, delete "WDCMA." and insert - - WCDMA. - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 14, LINE 22)

In Column 10, Lines 11-12, delete " $w=[w_1 \ W_2 \ \dots \ W_N]$ " and insert - - $w=[w_1$
 $w_2 \ \dots \ w_N]$ - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 14, LINE 36)

In Column 10, Line 25, delete " h_r " and insert - - h_r - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 15, LINE 13)

In Column 10, Line 33, delete " $w^H h_r$ " and insert - - $w^H h_r$ - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009,
PAGE 15, LINE 18)

In Column 10, Line 42, in Equation (7), delete “ $S_j = gw^H h_r S_j, j=1, \dots, M.$ ” and insert - - $\hat{S}_j = gw^H h_r S_j, j=1, \dots, M.$ - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009, PAGE 15, LINE 23, EQUATION (7))

In Column 10, Line 46, in Equation (8), delete

$$L_{l,m} = K \cdot (|\tilde{r} - s_{0,l,m}|^2 - |\tilde{r} - \tilde{s}_{1,l,m}|^2),$$
and insert - -

$$L_{l,m} = K \cdot (|\tilde{r} - \tilde{s}_{0,l,m}|^2 - |\tilde{r} - \tilde{s}_{1,l,m}|^2),$$
- -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009, PAGE 15, LINE 26, EQUATION (8))

In Column 12, Line 3, delete “example” and insert - - example, - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009, PAGE 17, LINE 32)

In Column 12, Lines 21-30, delete “If a change in.....in FIG.4.” and insert the same in line 22, as a new paragraph.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009, PAGE 18, LINES 15-21)

In Column 13, Line 39, delete “hand.” and insert - - hand, - -, therefor.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009, PAGE 20, LINE 15)

In Column 13, Lines 50-51, delete “However, other.....the invention.” and insert the same in line 49, after “a received sequence.” as a continuation of the paragraph.
(AMENDMENTS TO THE SPECIFICATION DATED JANUARY 22, 2009, PAGE 20, LINES 21-24)

In Column 13, Line 67, in Claim 1, delete “modules;” and insert - - module; - -, therefor.
(AMENDMENTS TO THE CLAIMS DATED JANUARY 22, 2009, PAGE 3 OF 14, CLAIM 2, LINE 6)

The requested corrections are attached on Form PTO 1050.

Respectfully Submitted

, 2009

DATE

/SIDNEY L. WEATHERFORD, Reg#45602/

Sidney L. Weatherford
Registration No. 45602
Attorney of Record